Washington 12th August 1857.

To The Hon.ble Thomas Corwin
Secy of the Treasury

Sir;

Messrs James C. Booth and Campbell Morfit Chemists of Philadelphia are the proprietors of an invention for refining Gold upon a new and economical plan, and I am authorised to offer the use of it to the United States for the Mint at Philadelphia upon terms of great advantage to the Government.

The present cost of refining Gold at the Mint is $2500 — per Million

By this new way all that, may be saved.
Thus if 20 Millions are refined per Annum the saving will be $50,000
If 30 Millions, the saving will be $75,000
and so on in the same ratio.

As the great influx of Gold from California renders it indispensable that some more expeditious way of refining than that now followed at the Mint should be introduced, the present plan which besides its economy extends the power of operation within the same limits greatly beyond that under the Known Mode, will answer in a cheap form all the demands that are likely to come from any sources.

The cost to the Government for refining is . . . 5½ cts pr Oz.
The seigneurage now charged to depositors is . . . 5. cts
Producing a loss to the Mint of . . . . . ½ ct. p Oz.

By the present process Silver is used to so large an extent that the average sum necessary to be kept on hand is above $100.000

By the new invention no Silver is required so that the whole of the interest upon the above sum would be saved,

besides the loss incident to the constant chemical action on the silver.

The present capabilities of the United States Mint in Philadelphia do not permit more than two and a half Millions of Gold to be refined per Month; While upon the proposed plan four times as much or ten Millions can be refined in the same time and space.

In this particular alone the new method would augment the capacities of the Mint four fold, and this without cost-put down all objections arising from delay attendant upon the old mode.

Another great advantage is, that no ingredients employed in the process to change the malleableness of the Gold or in any degree render it brittle or impair its natural ductility

As the practical benefits are all that need be stated,- I will dispense with the details of the operation; and in order to show the advantages of the present invention over any other, make the following propositions in behalf of the proprietors -

First - That the refining shall be done at the Mint under its present officers at a cost of 2½ Cents per Ounce, and the difference between that and the Seignoriage of 5 cts per Oz, be equally divided between the Government and the Owners of the Invention; and be continued for ten years on those terms

By this the Treasury would make 1½ cts per oz instead of losing 5 10/th of a cent per oz as it now does.

Or. Second - To keep the charge to depositors for refining, to 4 cts per oz - refining at the Mint in Philadelphia under its present officers and allow all profit above actual cost and expences to the proprietors.

This arrangement to continue for Ten years - the Mint to retain all residues and to allow the usual wastage

By this the public would be benefitted in a reduction of 20 pr Ct upon the Seignoriage, while the Treasury would gain all the present cost of labor and Materials

Or. Third - To refine in the Mint entirely at the cost of the proprietors of the invention, for hands and Material allowing them 4 cts per Oz for their own benefit.

The residues to the Mint subject to usual allowances.

This would save all cost and receive revenue to the Treasury.

Or - Fourth - To refine out of the Mint at the expence of the proprietors of the Invention for four cents per ounce.

The usual wastage to be allowed, and the return of Gold to be in accordance with the Report of the Assayer of the Mint.

This would save all cost charges and expences whatsoever and throw all responsibility of loss and wastage upon the Contractors -

Besides this, the Mint would make One cent per Oz, or the diff rence between the Seignoriage of 5 cts and the Contract price of 4 cts per Oz.

These terms could be extended to Mints of the United States or other places under the supervision of one of the proprietors of the invention or their instructed and competent agents.

If the Secretary of the Treasury had the authority by law to purchase and this invention, it would be offered at this time for $100.000 (one hundred thousand dollars); - but inasmuch as

his power extends only to directing the management of the Mint upon the cheapest and best plan, and the one now proposed is believed from practical experience to comprehend both of those qualities, it is submitted to him for an early decision.

The plan now presented does not seek to withdraw any money from the Treasury, but on the contrary to convert an expence into a profit and to produce a revenue from a new source.

I have made the foregoing proportions to show that the refining can be done at about half the cost now charged for that duty.

The 18th Section of the Act of Congress of the 18th Jan'y. 1837 would therefore seem to make it imperative upon the Director of the Mint with the concurrence of the Secretary of the Treasury, to change the present Mode, as it is expressly enacted, that the rate of charges for refining shall not exceed the actual expense of the Materials and Labor employed in such Cases.

Another reason for offering alternative terms, is to satisfy the Department that a large profit may be made by the Government from the Operations of the Mint after paying all costs, and that too without altering the present rates; So that if it is desirable to make that branch of public service a source of revenue, the Secretary may recommend some legislation for that purpose. —— The law as it now stands is however quite sufficient to authorize the adoption of either of the offers which by excluding any allowance of profit to the Government reduces the Seigneurage so low as to be only a moderate compensation to the proprietors of the invention.

It is therefore for this reason that the Secretary is applied to for as the law directs that the charges shall be altered

from time to time, it contemplates a probability that they should be changed, and makes it obligatory that it should take place when the cost of the labor and materials could be reduced — As they may be by the new method.

In order to test the practicability, economy and usefulness of this plan, I respectfully request that instructions may be given to the Director of the Mint at Philadelphia to compare it in all its results with any other used or known at that Office for refining Gold, and to report to you the particulars of that Comparison.

Respectfully
Your Obt Servts
Henry W Morfit for
James C Booth and Campbell Morfit
proprietors

Aug 12th 1830

H. M. Morfit

Washington